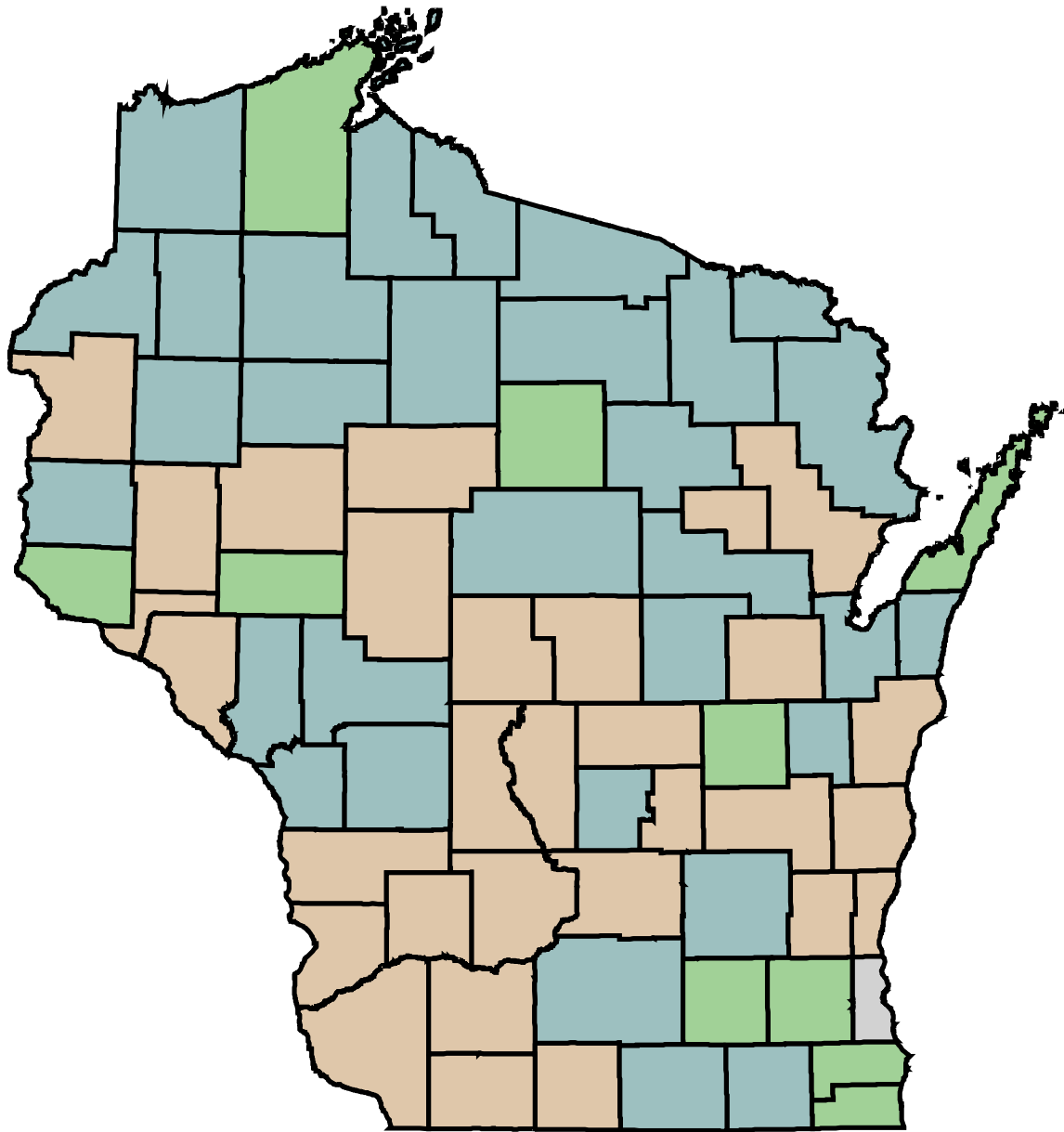






Shoreland Lot Area Standards

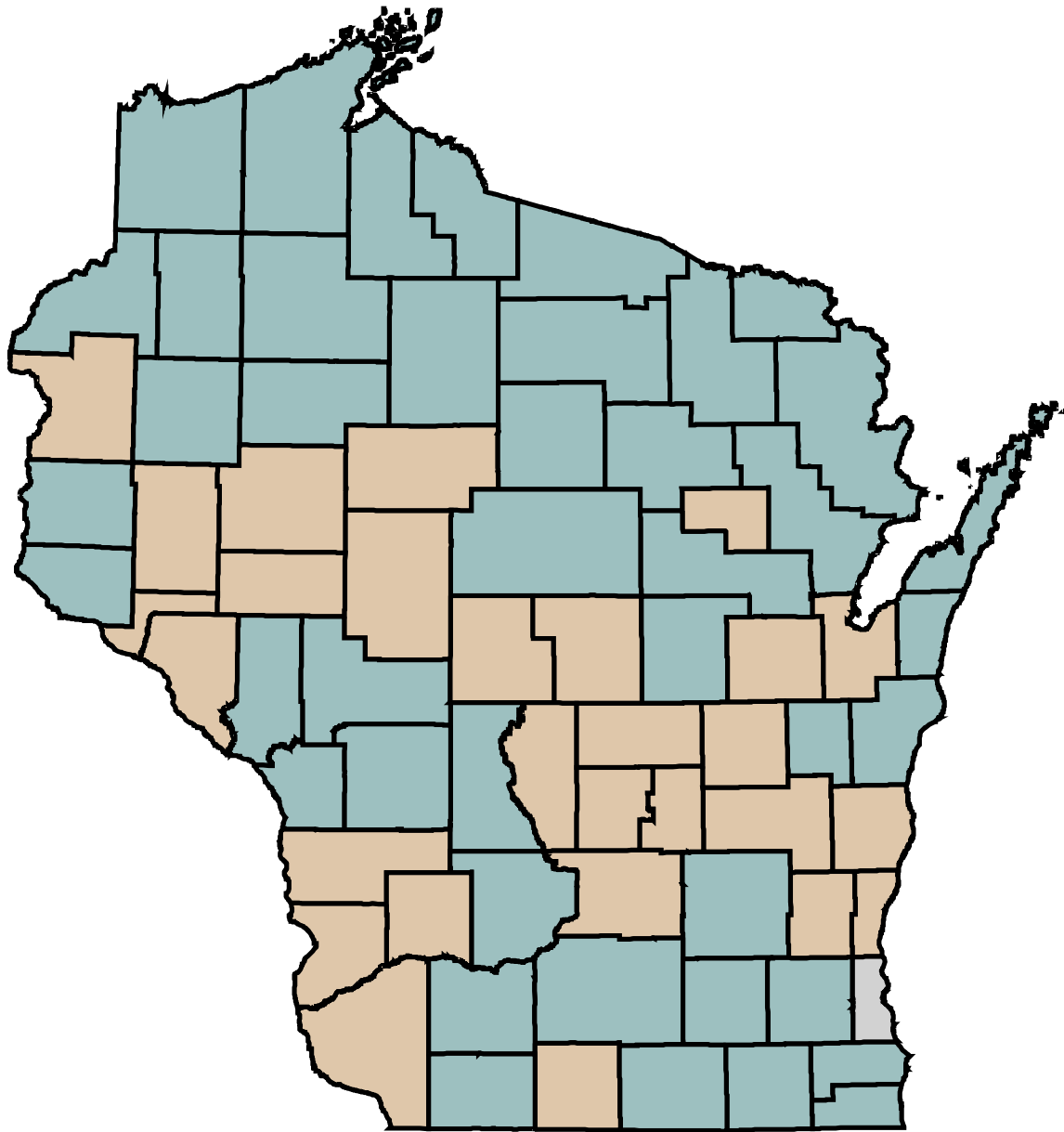


-  County is not regulated under NR 115.
-  County meets minimum lot area requirements from NR 115.
-  County exceeds minimum lot area requirements from NR 115 on all or some lakes, rivers, and streams.
-  County uses underlying zoning districts to determine minimum lot areas, which meet or exceed NR 115 requirements.

For more information, contact Carmen Wagner,
WI DNR, Shoreland Zoning Specialist, 608-267-7694.


May 22, 2000
Bureau of Watershed Management, WDNR

Shoreland Lot Width Standards



County is not regulated under NR 115.



County meets minimum lot width requirements in NR 115.



County exceeds minimum lot width requirements in NR 115 on all or some lakes, rivers, and streams.



SHORELAND LOT ISSUE SUMMARY

MANAGEMENT RATIONALE

The impacts of development on our lakes and rivers can be seen across the state. As shorelands shift from their natural undeveloped state into a landscape manipulated by humans, there are consequences.

Putting in a paved driveway, building a boathouse or removing dead tree debris along a shoreline may seem to have little effect on a lake or river as an individual action. However the interaction of these factors and the cumulative effects of many small impacts is what leads to the degradation of water quality and habitat for fish and aquatic life. Likewise, it is the cumulative impacts of many structures close together, near the water, and with minimal screening that degrade the natural beauty of the shoreline.

Controlling lot size and lot width helps to control the cumulative impacts of shoreland development. By limiting the number of lots on a shoreline, the potential for cumulative impacts are lessened, helping to prevent the degradation of water quality, near-shore and riparian wildlife habitat, and natural scenic beauty.

MINIMUM STATEWIDE STANDARDS

Chapter NR 115, Wis. Admin. Code, requires counties to meet minimum standards for lot size and average lot width in their shoreland zoning ordinance. These minimum standards were developed in the 1960's based on the best available scientific information, best professional judgment, and feasibility of implementation. The goal of minimum shoreland lot sizes and widths is to limit the impact of shoreland development on Wisconsin's lakes, rivers, and streams.

The minimum shoreland lot standards from NR 115 are:

Sewered Lots:	10,000 square feet	65 feet average minimum lot width
Unsewered Lots:	20,000 square feet	100 feet average minimum lot width

RELATED RESEARCH

Recent review and research has shown however, that the current minimum statewide standards are not effectively meeting the goals of Wisconsin's Shoreland Management Program.

A modeling study of phosphorus loading to a forested lake in Wisconsin demonstrates the impacts of development on water quality. When comparing an undeveloped forested site to a 1940s style development with a small 700 square foot house setback 150 feet from a lake with a 35 foot wide undisturbed buffer and a 20 foot wide path from the house to the lake, phosphorus loading did not increase. However, when the undeveloped lot was compared to a typical 1990s development with a large 3,350 square foot home setback 80 feet from the lake and the lot entirely converted to lawn, phosphorus loading increased 700% (J. Panuska to P. Sorge, internal memorandum, Nov. 4, 1994).

Additionally, the quality of fish and wildlife habitat generally decreases as the density of development increases along shorelines with nesting cover or foraging areas lost or degraded.

The natural scenic beauty of the shoreline can be negatively impacted by the placement and construction of structures. Landscape aesthetic assessment literature has generally found more natural scenes, those in which human presence or activities are relatively less visually apparent, are consistently preferred over scenes with more obvious human development (Bernthal 1997).

MANAGEMENT INITIATIVES

As a result, many counties are going beyond the requirements of Chapter NR 115, Wis. Admin. Code, based on their resource concerns. Many counties have increased the minimum shoreland lot sizes and widths for both sewered and unsewered lots. Marinette County for instance has a minimum lot area of 15,000 square feet for sewered lots and 30,000 square feet for unsewered lots. Some counties simply require one minimum lot size and width, regardless of whether the lot is sewered or not.

Other counties have turned to waterbody classification, where lakes, rivers, and streams are “classified” based on their sensitivity to pollutants, current level of development and other factors. As the sensitivity of a waterbody increases, so do the minimum lot sizes and widths. Some counties have just simply determined that lakes over 50 acres have a minimum lot size of 20,000 square feet and lakes under 50 acres or rivers and streams have minimum lot sizes 40,000 square feet.

Other counties have done much more intensive studies of their water resources and consider hydrology, depth, surface area, shoreline configuration, recreational use and other factors when determining how to classify their waters. The general categories used by counties are natural or wild waterbodies, intermediate waterbodies and general development waterbodies. Langlade County has used this method in its ordinance. The most sensitive or wild waterbodies require a minimum lot size of 120,000 square feet. Less sensitive or intermediate waterbodies have a minimum lot size of 80,000 square feet, and mostly developed waterbodies have a minimum lot size of 20,000 square feet. The average lot width was also increased to 300, 200 and 100 feet respectively. There was no differentiation between sewered and unsewered lots.

	<i>SENSITIVITY</i>		
	<i>HIGH</i>	<i>MEDIUM</i>	<i>LOW</i>
<i>LOT SIZE</i>	<i>120,000 SQUARE FEET</i>	<i>80,000 SQUARE FEET</i>	<i>20,000 SQUARE FEET</i>
<i>LOT WIDTH</i>	<i>300 FEET</i>	<i>200 FEET</i>	<i>100 FEET</i>

TABLE 1: Langlade County's Minimum Lot Sizes and Widths

CONSIDERATIONS

- Do the current minimum lot sizes in your local shoreland zoning ordinance allow adequate room for current development trends? Is there enough room for the home, garage, septic system and back-up septic system site most homeowners have today?

- Are the lakes and streams in your community similar in size, level of development and sensitivity to pollutants such that a single minimum lot size is appropriate or are your community's lakes and streams of a diverse nature and would be best managed with a range of minimum lot sizes?
- Are there special resources in your community, such as trout streams or outstanding water bodies, which would benefit from increased lot sizes and setbacks?
- Are there recreational resources in your community that draw tourists wanting to experience "wild nature" that would benefit the community economically to protect in a less developed state?
- Do you want to maintain a range of waterfront experiences along your shorelines – high density development to low density to natural?
- Are the water resources in your area fully developed or at varying stages of development? Would waterbody classification be appropriate to address the varying levels of development found in your community?
- Can you strengthen your local ordinance by incorporating impervious surface area limits, increasing setbacks or using other techniques to minimize the cumulative impacts of shoreland development?

BIBLIOGRAPHY

Bernthal, Thomas. 1997. *Effectiveness of shoreland zoning standards to meet statutory objectives: a literature review with policy implications*. Madison: Wisconsin Department of Natural Resources.

Abbreviations used in the following table are:

AG = Agriculture zoning district
 Bldg. = Building
 Dist. = District
 Min. = Minimum
 Nav. = Navigable
 OHWM = Ordinary high water mark
 Recreat. = Recreational zoning district
 Req. = Required
 s.f. = Square feet
 Spec. = Specified
 Swrd = Sewered
 Unswrd = Unsewered

Shoreland Lot Standards

<i>County</i>	<i>Lake Classification</i>	<i>River Classification</i>	<i>Lot Size</i>	<i>Lot Width</i>	<i>Shoreline Frontage Width</i>
Adams	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Not addressed in county's shoreland zoning ordinance.	Not addressed in county's shoreland zoning ordinance.	Not addressed in county's shoreland zoning ordinance.
Ashland	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=30,000 s.f.	Sewered=65' Unsewered=150' (average width)	Sewered=65' Unsewered=150' (at shoreline or other frontage)
Barron	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Minimum 62,500 s.f.	Minimum 250'	Not addressed in county's shoreland zoning ordinance.
Bayfield	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Varies w/ zoning district. (i.e. R-RB=30,000 s.f., R-2=4.5 acres)	Varies from min. of 75' to 300'.	Varies from min. of 75' to 300'.
Brown	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=40,000 s.f. or greater	Sewered=65' Unsewered=100' (at building line)	Sewered=65' Unsewered=100' (at water's edge)
Buffalo	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Sewered=65' Unsewered=100 (at OHWM)
Burnett	Class 1, 2, & 3	Rivers & Streams (same as 3)	1=30,000 s.f. 2=40,000 s.f. 3=75,000 s.f.	1=150' 2=200' 3 = 300'	Not addressed in county's shoreland zoning ordinance.
Calumet	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Swrdr=12,500 s.f. Unswrd=20,000 s.f. AG=43,560 s.f.	Swrdr=85' Unswrd=100' AG=150' (at building line)	Swrdr=85' Unswrd=100' AG=150' (at water's edge)
Chippewa	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Sewered=65' Unsewered=100' (at OHWM)
Clark	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Sewered=65' Unsewered=100 (at OHWM)
Columbia	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Sewered=65' Unsewered=100 (at OHWM)
Crawford	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Sewered=65' Unsewered=100 (at OHWM)
Dane	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=15,000 s.f. Unsewered=20,000 s.f.	Lots shall not be <100' in width at building setback line.	Not addressed in county's shoreland zoning ordinance.

County	Lake Classification	River Classification	Lot Size	Lot Width	Shoreline Frontage Width
Dodge	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=40,000 s.f.	Sewered=80' Unsewered=125'	Sewered=80' Unsewered=125'
Door	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Varies w/ zoning district from 16,200 s.f. to 35 acres.	Varies w/ zoning district from 90' to 600'.	Varies w/ zoning district from 90' to 600'.
Douglas	Class 1, 2, 3 & Wild Lakes (WL)	Rivers & Streams (same as 3)	1=30,000 s.f. 2=40,000 s.f. 3=80,000 s.f. WL=10 acres	1=150' 2=175' 3=200' WL=300'	1=150' 2=175' 3=200' WL=300'
Dunn	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=60' Unsewered=85' (at highway setback line).	Not addressed in county's shoreland zoning ordinance.
Eau Claire	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Varies w/ zoning district.	Varies w/ zoning district.	Not addressed in county's shoreland zoning ordinance.
Florence	Not utilized in county's shoreland zoning ordinance.	Wild Rivers Zone, i.e. Pine & Popple River (WR)	Sewered=10,000 s.f. Unsewered=20,000 s.f. WR=5 acres (seasonal)	Sewered=65' (average) Unsewered=100' (average) WR=500'	Sewered=65' (at OHWM) Unsewered=100' (at OHWM)
Fond du Lac	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (average minimum lot width)	Sewered=65' Unsewered=100' (at OHWM)
Forest	Lakes over 50 acres (L>50) & Lakes 50 acres or less (L<50)	Flowages, Rivers & Streams = L<50	L>50=20,000 s.f. L<50=40,000 s.f.	L>50=100' L<50=200' (at structure setback line)	L>50=100' L<50=200' (at OHWM)
Grant	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Sewered=65' Unsewered=100' (frontage at OHWM)
Green	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average width)	Not addressed in county's shoreland zoning ordinance.
Green Lake	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Not addressed in county's shoreland zoning ordinance.
Iowa	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=150' (minimum average lot width)	Sewered=65' Unsewered=100' (min. frontage at OHWM)
Iron	Lake Class 1 & 2	Rivers & Streams (same as 2)	1=40,000 s.f. 2=90,000 s.f.	1=200' 2=300'	Not addressed in county's shoreland zoning ordinance.

<i>County</i>	<i>Lake Classification</i>	<i>River Classification</i>	<i>Lot Size</i>	<i>Lot Width</i>	<i>Shoreline Frontage Width</i>
Jackson	Not utilized in county's shoreland zoning ordinance.	All lots on Black River from STH 54 downstream to county line =BR	Sewered=10,000 s.f. Unsewered=21,780 s.f. BR=1.5 acres	Sewered=65' Unsewered=120' BR=200'	Sewered=65' Unsewered=100' BR=200'
Jefferson	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Swrd=10,000 s.f. Unswrd =20,000 s.f (or of underlying dist.)	Sewered=80' Unsewered=100' (or of underlying dist.)	Not addressed in county's shoreland zoning ordinance.
Juneau	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Swrd=65' Unswrd=150' (width of frontage at water's edge)	Swrd=65' Unswrd=150' (width of frontage at water's edge)
Kenosha	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Varies with zoning district. R1=min. 5 acres. R6=min. 6000 s.f.	Varies with zoning district. R1=300'. R6=60' (at setback line).	Not addressed in county's shoreland zoning ordinance.
Kewaunee	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=40,000 s.f.	Sewered=65' Unsewered=150' (minimum average lot width)	Sewered=65' Unsewered=150' (frontage at OHWM).
La Crosse	Not utilized in county's shoreland zoning ordinance.	All lots on Black River from north county line south to HWY 35=BR	Sewered=10,000 s.f. Unsewered=20,000 s.f. BR=1.5 acres	Sewered=75' Unsewered=100' (average minimum lot width)	Sewered=75' Unsewered=100' BR=200' (at water's edge or OHWM)
Lafayette	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=150' (minimum average lot width)	Sewered=65' Unsewered=150' (min. frontage at OHWM).
Langlade	1=sensitive 2=less sensitive 3=mostly developed	1 = sensitive 2 = less sensitive	1=120,000 s.f. 2=80,000 s.f. 3=20,000 s.f.	1=225' 2=150' 3=100' (average)	1=300' 2=200' 3=100' (width at both OHWM & setback)
Lincoln	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Swrd=12,000 s.f. Unswrd=30,000 s.f. Recreat. 40,000=40,000 s.f.	Sewered=75' Unsewered=100' (at building line)	Sewered=75' Unsewered=150' (at waterline of nav. waters).
Manitowoc	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (at building line)	Sewered=65' Unsewered=100' (at OHWM) Greater widths may be req.
Marathon	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Swrd=10,000 s.f. (w/i 150' OHWM, lot=unswrd) Unswrd=20,000 s.f.	Swrd=65' (w/i 150' OHWM, lot=unswrd) Unswrd=100'	Sewered w/i 150' of OHWM & unsewered=100'.
Marinette	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=15,000 s.f. Unsewered=30,000 s.f.	Sewered =ave. min.=100' (at building line for unsewered)	Min. 100' of frontage at OHWM.
Marquette	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=30,000 s.f.	Sewered=65' Unsewered=100' (at building line)	Not addressed in county's shoreland zoning ordinance.

County	Lake Classification	River Classification	Lot Size	Lot Width	Shoreline Frontage Width
Menominee	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (at building setback line).	Sewered=65' Unsewered=100' (at OHWM).
Monroe	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=1.5 acres.	Sewered=80' Unsewered=150'	Not addressed in county's shoreland zoning ordinance.
Oconto	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=66' Unsewered=100' (at bldg. line & road frontage).	Min. 100' at OHWM.
Oneida	Class I=<50 acres Class II=>50 acres	Class II=All rivers & streams	I=50,000 s.f. (80% not shoreland/wetland) II=30,000 s.f. (90%")	I=150' (average) II=100' (average)	I=200' II=150'
Outagamie	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (at building line).	Sewered=65' Unsewered=100' (at water's edge).
Ozaukee	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width).	Sewered=65' Unsewered=100' (minimum frontage at OHWM).
Pepin	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (average minimum lot width).	Sewered=65' Unsewered=100' (at OHWM).
Pierce	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Varies, for Rural Resid. 20 Sewered=8,000 s.f. Unsewered=1 acre	Varies, for Rural Resid. 20 Swrd=50' Unswrd=100' (at bldg. line)	Not addressed in county's shoreland zoning ordinance.
Polk	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=60' min. & 65' ave. Unsewered=90' min. & 100' ave.	Not addressed in county's shoreland zoning ordinance.
Portage	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Sewered=65' Unsewered=100' (minimum frontage at OHWM)
Price	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=20,000 s.f. Unsewered=30,000 s.f.	Sewered=100' (min. ave.) Unsewered=150' (at bldg. setback)	Sewered=100' Unsewered=150' (of frontage at OHWM).
Racine	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Varies w/ zoning dist. from 10,000 s.f. (R5A) to 5 acres (R1).	Varies with zoning dist. from 65' (R5A) to 300' (R1).	Not addressed in county's shoreland zoning ordinance.
Richland	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Sewered=65' Unsewered=100' (minimum frontage at water's edge)
Rock	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=15,000 s.f. Unsewered=40,000 s.f.	Swrd=100' (on public road) Unswrd=100' (min. ave. lot width)	At least 100' of frontage at water's edge.

<i>County</i>	<i>Lake Classification</i>	<i>River Classification</i>	<i>Lot Size</i>	<i>Lot Width</i>	<i>Shoreline Frontage Width</i>
Rusk	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Min. lot area=20,000 s.f.	Min. lot width=100'	Min. frontage=100' at OHWM.
St. Croix	Not utilized in county's shoreland zoning ordinance.	St. Croix River Valley District (SC)	Sewered=12,750 s.f. Unsewered=1 acre SC=Density of 1 DU/acre.	Sewered=80' Unswrd not addressed. SC=200' (both at bldg. line)	Sewered=80' at water line. Unswrd & SC not addressed.
Sauk	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Min. lot width at building line=100'.	Min. 100' of frontage at OHWM.
Sawyer	1, 2 & 3	Rivers & Streams (same as 2)	1=20,000 s.f. 2=30,000 s.f. 3=40,000 s.f.	1=100' 2=150' 3=200'	Not addressed in county's shoreland zoning ordinance.
Shawano	White Lake Protection District (WL)	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f. WL=80,000 s.f.	Sewered=65' Unsewered=100' (ave. min. lot width) WL=200'	Sewered=65' Unsewered=100' (at OHWM) WL=200' parallel to shore.
Sheboygan	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average lot width)	Swrd=65' Unswrd=100' (at water's edge that abut nav. waters.)
Taylor	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average width)	Sewered=65' Unsewered=100' (at OHWM)
Trempealeau	Not utilized in county's shoreland zoning ordinance.	Black River from Jackson Cty line to STH 93 = BR	Sewered=10,000 s.f. Unsewered=20,000 s.f. BR=1.5 acres	Swrd=65' Unswrd=100' (ave. lot width) BR=200' (water's edge)	Swrd=65' Unswrd=100' (frontage at OHWM) BR=200' (water's edge)
Vernon	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average width)	Sewered=65' Unsewered=100'
Vilas	Matrix based on sensitivity to & current level of development	Class I=1 Class II=2	(1) 60,000 s.f. (2) 40,000 s.f. (3) 30,000 s.f.	(1) 270' (2) 180' (3) 135'	(1) 300' (2) 200' (3) 150'
Walworth	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=15,000 s.f. Unsewered=40,000 s.f.	Sewered=100' Unsewered=150' (at rear of spec. street yard)	Not addressed in county's shoreland zoning ordinance.
Washburn	1, 2 & 3	Rivers & Streams (same as 3)	1=30,000 s.f. 2=80,000 s.f. 3=3 acres	1=150' 2=200' 3=300'	Not addressed in county's shoreland zoning ordinance.
Washington	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' Unsewered=100' (minimum average width)	Not addressed in county's shoreland zoning ordinance.

County	Lake Classification	River Classification	Lot Size	Lot Width	Shoreline Frontage Width
Waukesha	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Varies w/ zoning dist. from 20,000 s.f. (R3) to 35 acres (AP).	Varies w/ zoning dist. from 120' (R3) to 600' (AP).	Not addressed in county's shoreland zoning ordinance.
Waupaca	Group 1, 2, & 3 Lakes	River and Stream (R/S) & Trout Streams (T)	1=5 acres 2=2 acres 3=20,000 s.f. R/S & T=40,000 s.f.	1=400' 2=200' 3=100' R/S & T=200' (at min. shoreline setback).	1=400' 2=200' 3=100' R/S & T=200' (at OHWM).
Waushara	Not utilized in county's shoreland zoning ordinance.	Class I, II & III Trout Streams	Swrdr=10,000 s.f. Unswrd=20,000 s.f. (if more restrictive)	Sewered=65' Unsewered=100' (at the building line)	Sewered=65' Unsewered=100' (at OHWM)
Winnebago	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f. (in R-2).	Sewered=65' Unsewered=100' (at the shore setback & street)	Minimum frontage=33'.
Wood	Not utilized in county's shoreland zoning ordinance.	Not utilized in county's shoreland zoning ordinance.	Sewered=10,000 s.f. Unsewered=20,000 s.f.	Sewered=65' (at OHWM) Unsewered=100' (at building line).	Sewered=65' Unsewered=100' (at OHWM)

Shoreland Lot Ordinance Language

LANGLADE COUNTY

17.30 (12) (b)

WATER CLASS DEVELOPMENT STANDARDS.

All development shall comply with both the general development standards of this ordinance which apply throughout the Shoreland and with the class development standards of this section.

CLASS DEVELOPMENT STANDARDS			
ISSUE	CLASS 1 WATERS (sensitive, mostly undeveloped lakes & streams)	CLASS 2 WATERS (less sensitive, partially developed lakes & all other rivers & streams)	CLASS 3 WATERS (mostly developed lakes)
Lot Size (min. R1 & R2 Waterfront)	120,000 sq. ft./unit	80,000 sq. ft./unit	20,000 sq. ft./unit
R1 & R2 backlot	5 acres or cluster development		
Parks & Rec. *Waterfront & backlot	5 acres or cluster development		
*Multiunit attached & campground	+5% of min. lot size & width for each unit over 20 (1/4 acre & 20 ft. water frontage/unit)		
*Multiunit detached	+10% of min. lot size & width for each unit over 20 (1/2 acre & 40 ft. water frontage/unit)		
Lot Width			
*@OHWM & Setback	300 ft.	200 ft.	100 ft.
*Ave lot width (min.)	225 ft.	150 ft.	100 ft.
Shore Setback (from OHWM, HWM on fluctuating lakes)	125 ft.	100 ft.	75 ft.
Side & Rear Yards (min.) (1 side/total side/rear)	30/90/30 ft.	20/60/20 ft.	10/30/10 ft.
Vegetation Protection Area (no cut or land disturbance)	Within 100' of OHWM & 30' both sideyards	Within 75' of OHWM & 20' both sideyards	Within 50' OHWM
Boathouses & Shelters (see Section 17.30 (7) for construction stds)	Prohibited	One boat shelter per dwelling unit	One boathouse per lot & 1 boat shelter dwelling unit

PRICE COUNTY

4.0 DIMENSIONS OF BUILDING SITES

4.1 LOTS NOT SERVED BY PUBLIC SANITARY SEWER

4.11 MINIMUM AREA AND WIDTH FOR EACH MAIN BUILDING. Lots created after June 20, 1995 shall contain a minimum of 30,000 sq. ft.; and provide 150 feet of frontage at the ordinary high water mark; and provide 150 feet of width at or beyond the applicable minimum setback required for building.

4.12 SIDE YARDS. There shall be a side yard for each main building. The minimum width of one main side yard shall be 10 feet. The minimum combined width of both main side yards shall be 25 feet. There shall be a side yard of 5 feet for accessory structures excluding fences.

4.2 LOTS SERVED BY PUBLIC SANITARY SEWER.

4.21 MINIMUM AREA AND WIDTH FOR EACH MAIN BUILDING. The minimum lot area shall be 20,000 sq. ft. and the minimum average lot width shall be 100 feet with at least 100 feet of frontage at the ordinary high water mark.

4.22 SIDE YARDS. The minimum width of one main side yard shall be 8 feet. The minimum combined width of both main side yards shall be 20 feet. There shall be a side yard of 4 feet for accessory structures excluding fences.

RUSK COUNTY

17.57 (4.0) DIMENSIONS OF BUILDING SITES. Except as provided in Section 17.59 the following shall apply:

4.01 MINIMUM AREA AND WIDTH FOR EACH PRINCIPLE STRUCTURE. The minimum lot area shall be 20,000 square feet and the minimum lot width shall be 100 feet with at least 100 feet of frontage at the ordinary highwater mark.

4.02 SIDE YARDS. There shall be a side yard for each principle structure. The minimum width of one main side yard shall be 15 feet. The minimum combined width of both side yards shall be 35 feet. There shall be a side yard of 5 feet for accessory structures excluding fences.

4.03 LOT DEPTH TO WIDTH RATIO. No lot shall be more than 6 times as deep as it is wide.

WAUPACA COUNTY

4.0 DIMENSIONS AND STANDARDS FOR BUILDING SITES.

4.1 LOT AREA AND WIDTH.

Minimum lot area and width shall be as specified for each shoreland overlay district in Section 7.

7.2 GROUP 1 LAKE MANAGEMENT OVERLAY DISTRICT (Wild Lakes)

7.21 Designation and Intent: The Group 1 Lake Overlay District includes Group 1 lakes listed in the Lake Shoreline Classification Study – Waupaca County (1997). The district regulations are intended to provide a high level of protection for shorelands and waters which are the most environmentally sensitive, with very limited natural carrying capacity and which have little or no existing development.

7.22 Permitted Uses: Any principal or accessory use permitted in the underlying zoning district.

7.23 Conditional Uses: Any conditional use authorized in the underlying district.

7.24 Minimum Lot Size: 5 acres.

7.25 Minimum Lot Width:

At the Ordinary High Water Mark: 400 feet.

At the Minimum Shoreline Setback: 400 feet.

7.26 Minimum Shoreline Frontage for Additional Dwelling Units: 400 feet per dwelling unit granted riparian or lake access rights. (See Section 3.2 for Planned Residential Unit Development alternative.)

7.27 Minimum Shoreline Setback: 300 feet from the ordinary High Water mark (OHWM) for all structures except piers.

7.28 Vegetation Protection Area: Within 275 feet of the ordinary High Water mark, vegetation removal and land disturbing activities are restricted as described in Section 5.5. Shoreline protection structures including rock rip-rap are prohibited on Group 1 lakes. However, bioengineered shore stabilization techniques approved by the County Land Conservation Department are permissible.

7.3 GROUP 2 LAKE MANAGEMENT OVERLAY DISTRICT (Moderate Development Lakes)

- 7.31 Designation and Intent: The Group 2 Lake Overlay District includes Group 2 lakes listed in the Lake Shoreline Classification Study – Waupaca County (1997). The district regulations are intended to provide a moderate level of protection for shorelands and waters which are environmentally sensitive, with some limitations on natural carrying capacity and which have a moderate amount of existing development.
- 7.32 Permitted Uses: Any principal or accessory use permitted in the underlying zoning district.
- 7.33 Conditional Uses: Any conditional use authorized in the underlying district.
- 7.34 Minimum Lot Size: 2 acres.
- 7.35 Minimum Lot Width:
At the Ordinary High Water Mark: 200 feet.
At the Minimum Shoreline Setback: 200 feet.
- 7.36 Minimum Shoreline Frontage for Additional Dwelling Units: 200 feet per dwelling unit granted riparian or lake access rights. (See Section 3.2 for Planned Residential Unit Development alternative.)
- 7.37 Minimum Shoreline Setback: 100 feet from the ordinary High Water mark (OHWM) for all structures except piers.
- 7.38 Vegetation Protection Area: Within 75 feet of the ordinary High Water mark, vegetation removal and land disturbing activities are restricted as described in Section 5.5.

7.4 GROUP 3 LAKE MANAGEMENT OVERLAY DISTRICT (General Development Lakes)

- 7.41 Designation and Intent: The Group 3 Lake Overlay District includes Group 3 and 4 lakes and all impoundments and bayous listed in the Lake Shoreline Classification Study – Waupaca County (1997) and all lakes in the county not identified in the report. The district regulations are intended to provide protection for shorelands and waters which have significant existing development or which were not specifically studied in the report.
- 7.42 Permitted Uses: Any principal or accessory use permitted in the underlying zoning district.
- 7.43 Conditional Uses: Any conditional use authorized in the underlying district.
- 7.44 Minimum Lot Sizes: 20,000 square feet.
- 7.45 Minimum Lot Width:

At the Ordinary High Water Mark: 100 feet.
At the Minimum Shoreline Setback: 100 feet.

- 7.46 Minimum Shoreline Frontage for Additional Dwelling Units: 100 feet per dwelling unit granted riparian or lake access rights. (See Section 3.2 for Planned Residential Unit Development alternative.)
- 7.47 Minimum Shoreline Setback: 75 feet from the ordinary High Water Mark (OHWM) for all structures except piers.
- 7.48 Vegetation Protection Area: Within 50 feet of the ordinary High Water mark, vegetation removal and land disturbing activities are restricted as described in Section 5.5.

7.5 RIVER AND STREAM OVERLAY DISTRICT

- 7.51 Designation and Intent: The River and Stream Overlay District includes all rivers and streams in Waupaca County and is intended to provide protection for all shorelands and waters of rivers and streams and a higher level of protection for identified high quality trout streams.
- 7.52 Permitted Uses: Any principal or accessory use permitted in the underlying zoning district.
- 7.53 Conditional Uses: Any conditional use authorized in the underlying district.
- 7.54 Minimum Lot Size: 40,000 square feet.
- 7.55 Minimum Lot Width:
At the Ordinary High Water Mark: 200 feet.
At the Minimum Shoreline Setback: 200 feet.
- 7.56 Minimum Shoreline Frontage for Additional Dwelling Units: 200 feet per dwelling unit granted right or water access rights. (See Section 3.2 for Planned Residential Unit Development alternative.)
- 7.57 Minimum Shoreline Setback: 100 feet from the ordinary High Water mark (OHWM) for all structures except piers on unclassified rivers and streams and 125 feet for all structures on trout streams listed in the most current Wisconsin Department of Natural Resources Publication Wisconsin Trout Streams.
- 7.58 Vegetation Protection Area: Within 75 feet of the ordinary High Water mark on unclassified rivers and streams and within 100 feet of the ordinary high water mark on trout streams, vegetation removal and land disturbing activities are restricted as described in Section 5.5. In addition, shoreline protection structures other than rock rip-rap and bioengineered techniques approved by the County Land Conservation Department are prohibited on trout streams.

Shoreland Lot Resources

PRESENTATIONS

Lake Classification for Shoreland Management. (44 slides, July 1999). Powerpoint presentation explaining how lake classification can be used to protect water resources and how classification systems are developed. Available on-line from the Wisconsin Department of Natural Resources at:
[<http://www.dnr.state.wi.us/org/water/fhp/papers/p3/index.htm>].

Lot Sizes and Pattern of Development. (unknown, 2000). Powerpoint presentation illustrating the effects of lot sizes and development patterns on water quality, wildlife habitat, and natural aesthetics. Available from the Land Use Education Center, College of Natural Resources, University of Wisconsin – Stevens Point, 1900 Franklin Street, Stevens Point, WI, 54481 or by phoning (715) 346-3879.

Margin of error? Human influence on Wisconsin shores. (80 slides, June 1999). Powerpoint presentation which highlights the impacts of human development on lake shores, describes shoreland zoning, and explains a new management technique called lake classification. Available on-line from the Wisconsin Department of Natural Resources at: [<http://www.dnr.state.wi.us/org/water/fhp/papers/p2/index.htm>].

EDUCATIONAL MATERIALS

Guiding Lakeshore Development through Lot Size and Side Yard Standards (2 pp., February 1999). Fact sheet explains the link between lot sizes and shoreland buffer functions. Available from Wisconsin Association of Lakes, (800) 542-5253 or UWEX, Stevens Point at (715) 346-2116. Ask for fact sheet #13 of the Shoreland Management and Lake Classification Series.

Lakeshore Development . . . It All Adds Up! (2 pp., February 1999). Explains how lakeshore development impacts lakes. Available from Wisconsin Association of Lakes, (800) 542-5253 or UWEX, Stevens Point at (715) 346-2116. Ask for fact sheet #12 of the Shoreland Management and Lake Classification Series.

Waterbody Classification in Washington County: A Local Example of a Growing Trend. (8 pp., 2000) Describes the process of one county as it goes through waterbody classification. Available from UW-Extension Regional Planning Educator, 916 N. East Avenue, PO Box 1607, Waukesha, WI, 53187-1607 or by phoning (262) 547-6721.

What is Lake Classification? (2 pp., February 1999). Defines lake classification and describes how it works. Available from Wisconsin Association of Lakes, (800) 542-5253 or UWEX, Stevens Point at (715) 346-2116. Ask for fact sheet #1 of the Shoreland Management and Lake Classification Series

TECHNICAL REFERENCES

A Guide for County Lake Classification. (60 pp., June 1999). This is a guidebook for communities as they proceed through the lake classification process. It provides general information on lake classification grant opportunities, as well as specific information on developing lake classification objectives, crafting a classification system, and shaping management strategies. Available from Wisconsin Department of Natural Resources, Lakes and Wetlands Section, (608) 266-2244 or from UWEX – Stevens Point, (715) 346-2116.

An Introduction to Lake Classification for Shoreland Development Impacts. (28 pp., October 1998). Booklet establishes a process for classifying lakes for waterbody classification efforts. Includes several examples. Available from the Land Use Education Center, College of Natural Resources, University of Wisconsin – Stevens Point, 1900 Franklin Street, Stevens Point, WI, 54481 or by phoning (715) 346-3879.

A River Classification System (Shoreland Update Program Report No. 5). (84 pp., 1984). This report examines 157 rivers in Minnesota and proposes five (5) management classes and specific management objectives for those classes. Available from Minnesota Department of Natural Resources, Division of Waters, Floodplain/Shoreland Management Section, (651) 296-4800.

Nutrient Loading Impacts: Phosphorus Export from a Low-density Residential Watershed and an Adjacent Forested Watershed. (7 pp., 1986). This study shows that a watershed with low density residential subdivisions (~30,000 square foot lots) and 40% remaining forest cover delivered 7.2 times more phosphorus to the water than a similar undeveloped watershed (more phosphorus = more algae in lake). Article by J. Dennis in *Lake and Reservoir Management: Vol. II* (1986).

Understanding Lake Data. (20 pp., 1993). An introduction to understanding limnology data and how to use it. Available from University of Wisconsin – Extension Publications, 45 North Charter Street, Madison, WI, 53715 or by calling (877) 947-7827. Ask for Publication Number G3582.

Use of Paleolimnology to Document the Effect of Lake Shoreland Development on Water Quality. (30 pp., 1999). This study of sediment cores documents greater sediment loads in recent years as cabins have been converted to larger year-round homes compared to when the cabins were originally built. Lakes with low alkalinity (mineral) content are especially sensitive to phosphorus inputs (Minerals bind phosphorous in the water so that it's not available to fuel algae growth). Article by P. Garrison, et. al. in *Journal of Paleolimnology* (1999).